Remarks

Claims 1-11 remain pending in this application after entry of this paper. Claims 1-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Laubach et al. (U.S. Patent No. 6,081,533). Applicants believe that the invention is patentable, and have amended claim 1 to more particularly point out the invention.

Claim 1 recites a method for providing personalized interactive programming over a data path. The data path extends between a service provider and a set top box. The service provider is connected to a data network and has an address. The method comprises establishing a communication path between a broadband digital terminal and the set top box. The broadband digital terminal is connected to the data network. The service provider broadcasts video through the broadband digital terminal to the set top box. The method further comprises sending a private data packet from the service provider, over the network to the set top box. The private data packet contains application interface information and contains the service provider address. The method further comprises establishing an impulse pay-per-view communication path between the set top box and the service provider based upon the address to allow interactive programming between the service provider and the set top box.

Put another way, the invention comprehends sending application interface information and the service provider address in a private data packet from the service provider such that (instead of simply receiving streaming data) an impulse pay-per-view communication path between the set top box and the service provider is established to allow interactive programming between the service provider and the set top box. The invention personalizes the data sent on a private virtual channel between the provider and the broadband digital terminal. The use of the private data packets from the provider brings the interactivity of programming to a new level, not achieved by any known systems.

In combination with other features, claim 1 has been amended to more particularly point out the invention and specifically recites sending the private data packet in

addition the broadcast video from the service provider, over the network and through the broadcast digital terminal to the set top box, and further recites that the packet contains application interface information for the service provider and contains the service provider address. Still further, claim 1 recites establishing the impulse pay-per-view communication path between the set top box and the service provider based upon the address, allowing interactive programming using the application interface information between the service provider and the set top box to personalize the broadcast programming.

As exemplified by the detailed description and drawings, video/data service provider 12 broadcasts MPEG2 video through broadband digital terminal 24 to set top box 30. The private data packet (PDP) is sent from video/data provider 12 and contains application interface information as well as the service provider address. That is, instead of simply sending streaming data, the service provider sends the private data packet through the broadband digital terminal to the set top box. In this way, based upon the address received in the private data packet, set top box 30 may establish an impulse pay-per-view communication path between the set top box 30 and the service provider 12 to allow interactive programming between the service provider and the set top box.

Laubach is far different than the invention. Laubach describes a method and apparatus for an application interface module in a subscriber terminal unit. The method of Laubach enhances the functionalities of a subscriber terminal unit (STU) or ADSL terminal unit (ATU) through the use of different types of application interface modules (AIMs). A slot is incorporated in the STU/ATU through which a detachable AIM can be inserted and electrically coupled to the STU/ATU. The hardware application interface module described in Laubach is wholly unrelated to Applicants' invention. More specifically, Laubach fails to suggest the invention as recited by claim 1. More specifically, Laubach fails to suggest or recite the technique of using private data packets to establish an impulse pay-per-view communication path between the set top box and the service provider. The Examiner makes general references to portions of Laubach, but fails to suggest Applicants' invention.

For example, the Examiner makes reference to col. 4, lines 54-64 and col. 16, lines 37-64 as suggesting the claimed technique of using private data packets to establish an impulse pay-per-view path. Again, Laubach fails to suggest the claimed invention. In col. 4, Laubach discusses packet data, ATM cells, RF signals, and also makes reference to the conversion of packet data to ATM cells and the conversion of ATM cells back into packet data. However, claim 1 specifically recites the technique utilizing a private data packet and establishing an impulse pay-per-view communication path. There is no such suggestion in Laubach, Laubach only describes packets themselves in general as well as the use of the hardware application interface module (AIM). None of these items suggest the claimed innovative technique. In col. 16, Laubach discusses the AIM module, as well as cells and signals, video on demand functionality, etc. Again, these various references fail to suggest the claimed invention recited by claim 1 wherein private data packets are utilized to establish an impulse pay-per-view communication path.

The invention uses private data packets to establish an impulse pay-per-view communication path between the set top box and the service provider. Applicants' innovative technique has a number of advantages. The use of a hardware application interface module and the various discussions of cells and packets in Laubach are far different than the claimed invention which, as recited by claim 1, sends a private data packet from the service provider containing application interface information and containing the service provider address, and establishes an impulse pay-per-view communication path. Claim 1 is believed to be patentable.

In the Office Action mailed February 13, 2004 (Paper No. 7), the Examiner continues to make various references to portions of Laubach. However, Applicants have amended claim 1 to more particularly point out the invention and believe that the invention is patentable over Laubach.

In particular, claim 1 has been amended to better emphasize the fact that the service provider is broadcasting video through the broadband digital terminal to the set top box. Further, the private data packet is sent in addition to the broadcast video from the service

provider, over the network and through the broadband digital terminal, to the set top box. The packet contains application interface information for the service provider and contains a service provider address. In this way, an IPPV communication path may be established to allow interactive programming using the application interface information between the service provider and the set top box to personalize the broadcast programming. That is, this is a method and technique for providing personalized broadcast programming in that the service provider is broadcasting video through the broadband digital terminal to the set top box and sending a private data packet in addition to the broadcast video. The fact that the packet contains application interface information for the service provider and contains the service provider address enables the establishing of an IPPV communication path. In turn, this allows the interactive programming.

Laubach fails to suggest this specific combination. Laubach only refers to the AIM module which is far different than the arrangement contemplated by Applicants' invention. In an attempt to read the claimed invention on Laubach, the Examiner makes reference to data packets, and video-on-demand (VOD) communication paths in Laubach. Further, the Examiner takes official notice of the IPPV path.

Packet data and the VOD communication path in Laubach are far different than the arrangement comprehended by the invention. Applicants direct the Examiner's attention to col. 16, lines 37-64. This portion describes video-on-demand functionality. But this VOD arrangement is really an arrangement where the infrared commands are converted to packets which transfer to the video controller in the head end unit for further processing. VOD is managed at the head end. In contrast, the invention comprehends an arrangement with the service provider broadcasting video over the network through the broadband digital terminal and to the set top box (this is the network broadcast). A private data packet is sent in addition to the broadcast video. Thus, the invention comprehends an enhancement to broadcast programming which is far different than video-on-demand arrangements which only provide a specialized casting arrangement as opposed to the personalizing of broadcast programming comprehended by the invention.

Applicants believe that the Examiner has misconstrued various aspects of Laubach, and that the invention is patentable. With regard to the Examiner's taking of official notice that establishing an IPPV path is well known, Applicants note that various other claimed features of the invention are not suggested by Laubach. In particular, the VOD arrangement in Laubach referred to by the Examiner lacks a number of claimed features including, for example, the claimed feature of broadcasting video through the broadband digital terminal to the set top box while sending a private data packet in addition to the broadcast video from the service provider over the network, and through the broadband digital terminal, to the set top box with the packet containing application interface information for the service provider and containing a service provider address. Thus, the IPPV communication path recited in the claims is far different than the VOD communication path referred to by the Examiner. Accordingly, Applicants believe that this taking of official notice is inappropriate and respectfully requests that the Examiner provide a supporting prior art reference or withdraw the official notice.

Claims 2-4 are dependent claims and are also believed to be patentable.

Claim 5 is an independent claim for a system of the present invention and is also believed to be patentable. Claim 5 recites similar subject matter as independent claim 1 including the use of the private data packet containing application interface information and the destination address as well as establishing an impulse pay-per-view data path extending from the set top box to the broadband digital terminal.

Claims 6-11 are dependent claims and are also believed to be patentable.

Allowance of claims 1-11 is respectfully requested.

Respectfully submitted,

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